Appendix 1 - Planting	rates for drill or broadca	st se	edi	ing	an	d s	orio	gir	ıg i	n T	exa	s, Z	Zone	1							
		e v		Γ		Ada					r La	nd	,	Seed	dina						
		e. (Re	sou	rce	Are	as				ance		apte Soil				
		pur /	: _		핑		<u> </u>	_ [ć	3 [5	ıЩ	П	П	Ŧ			Dy .	3011	Gio	ups	3 3/	
		ds /.	٦	1	2 (7			3 E			38)	0		Seeding Dates							
		Jino	Š		ä	¥.	est.	S to	5 6	sks	West (78B)	East (78C)		ã							
		e p	Пğ	٦	Bre	7	ا لا	all		šre,	est	st (ij.			e Se				
		ar era	ŧ	N#	au	t l	5 0	1 =	3 3	2 1	≥	Ea		ee	8		Coarse		Je		
		tes) pe	5	95	adi	ž	Z 1	g v	5 0	ج ا د	ins	Plains E			>		õ		Ē		
		g rs	ĺ	Ď	ğ	ains	ii l	- L ig	2.5	<u> </u>	Pla	Pla		Ę			tely	_	tely		
		l ig K	e	Son	ě	풉	<u> </u>		Ď	<u> </u>	ng l	ng		Ξ		se.	era	ium	era		
Name	Variety	Seeding rates are pounds pure live seed (PLS) per acre 3/, 6/, 10/	Native (N) or Introduced	Season of growth	Upper Canadian Breaks (70	High Plains North (77A)	High Plains, Northwest	Southern High Plains (770)	High Plains Southwest (777)	Canadian River Breaks (77E	Rolling	Rolling		Maximum		Coarse	Moderately (Med	Moderately Fine	Fine	Comments
PERENNIAL GRASSES																					
1/, 4/			_	1				-1			1		-								
Bermudagrass: hulled	common	2.3	_		Х		X 2					_		2/1 -			Χ			Ш	
Bermudagrass: unhulled	common	3.0	L	W	Х	Х	X 2	X X	()	(X	X	Х	12	2/1 -	6/1	Χ	Χ	Х		Ш	
	African star, Alicia, Brazos,		Ī	l	1	- [I				1	
	Callie, Coastal, Coast-																				
	Cross I, Jiggs, Guymon,																				
	Grazer, Midland, Selection																				
	3, Sheffield, Tifton 44, Tifton																				
Darmudaaraa Cariaaad	68, Tifton 78, Tifton 85, World Feeder	12 bu	I.	١.,,	V	Х	νl,		, ,	, ,	X	V	40	2/1 -	C/4	V	х	_	~		Cover depth is one to three inches.
Bermudagrass: Sprigged Bluestem: big	Earl, Kaw, local harvest	6.0	N	W				<u> </u>						2/1 -		X	X				Use only when adequate moisture conditions exist.
Bluestem: cane, silver	Lan, Naw, local harvest	1.2			X		<u> </u>			X				2/1 -		^		X			ose only when adequate moisture conditions exist.
	Cimmaron, Pastura,		Ť	Ė		Ť	1			Ť			_ <u> </u>	-							
Bluestem: little	native mix	3.4	Ν	W	Х			x x				Х	12	2/1 -	6/1		Х		Х		Use only when adequate moisture conditions exist.
Bluestem: sand	Elida, Woodward	6.0	Ν	W	Χ	Χ	X Z	X X		(X	X	Χ	12	2/1 - 1	6/1	Χ	Χ	Χ			
	Angleton, Australian,																				
	Caucasian, Gordo, King																				
	Ranch, Kleberg, Medio, Pretoria-90, T-587,																				Use on sandy clay loam soils only when a sandy clay loam layer is present
Bluestem, yellow	WW-B Dahl	1.2	Ь	\//	x	x	x l	x x	داء	ďχ	X	x	12	2/1 -	6/1		x	х	x	x	within 8 to 12 inches of the soil surface.
Bidestern, yenew	Ganada, Plains,	1.2	Ť	1	Ĥ	^	^ /	Ť	Ť	+	1	^	- '-	, .	0/ 1		^	^			Within 6 to 12 mones of the son surface.
Bluestem, yellow	Ironmaster, WW-Spar	1.8		W	Х	Х	x 2		()			Х		2/1 -			Х			Х	
Bristlegrass: plains 5/		3.0		W	_	Χ		X X				Χ		2/1 -		Х	Χ		Χ		
Bromegrass: smooth		10.0	_	С		Х		X X		X		ĻΙ			1/15		Х		Χ		Irrigated or Subirrigated Sites
Buffalograss: burs	Texoka	8.0		W	_	X		X X						2/1 -		_	Ш				Cover depth is 1/4 to 1/2 inches.
Buffalograss: dehulled	\	3.0 1.2		W	-	X		X		(X	_	X		2/1 - 2/1 -		_		X	X	X	Cover depth is 1/4 to 1/2 inches.
Cottontop: arizona	1		_	W	-	X		X		X			-			~	X		٨	X	
Dropseed: giant	1	1.0	-	-	-					_		X		2/1 -			X			H	
Dropseed: mesa	1	1.0	_	W	-	X	_	X X	_			X		2/1 -		_	_			H	
Dropseed: sand		1.0	_	W	_	X	_	X X	_	_	_			2/1 -			Х		X	H	
Dropseed: sand		1.0	_	W	_	X	_	X X	_					2/1 -		_	_	_	Χ	H	
Dropseed: spike		1.0	-	W		Х	_	X >	_	_	_	Х		2/1 -		Х		_		L.	
Dropseed: tall		1.0	N	W	Х	Х	X 2	X X	()	(X	X	Х	12	2/1 -	6/1	Х	Х	Х	Χ	Χ	
	luka, luka IV, Pete, San			1		J					1										
	Marcos germplasm, Texas		L	l	I.							$\lfloor \rfloor$									
Eastern gamagrass	Sue	10.0	Ν	W	Х	Х	X Z	X X		(X	X	Х	12	2/1 -	6/1		Х	Х	Χ		Cover depth is 1/2 to 3/4 inches. Irrigated Only

Appendix 1 - Planting	rates for drill or broadca	st se	edi	na	and	sp	ria	ain	a ir	n Te	exa	s. Z	one 1						
		live		Ŭ			ptati	ion b	y N	1ajo	r Laı		Seeding		apte				
		<u>e</u>					Res	sour	ce A	Area	S		Guidance	by 10/	Soil	Gro	oups	6	
		Seeding rates are pounds pure seed (PLS) per acre 3. 6. 9/			20	ā		, Ö	7	7E)									
		inds			Upper Canadian Breaks (70	<u>غ</u> ا ج		. 1	Southwest (7	Canadian River Breaks (77E	West (78B)	õ	8						
		nod e	ö		rea	Northwest) SO	rest	Nes	ak	st (7	East (78C)	>						
		acr	troc	ţ.	n B	<u> </u>	9	ţ.	ŧ	Ŗ	Wes	ast	um ates		Coarse		_		
		es se	=	ľov	dia	힐	3 5	Sol	So	Ver	, 'S	ы	iệ S		Soa		-in		
		S at	(N)	of g	ans	SU S	įΪ	ns	ns,	R	lair	ai.	M Ma		<u>~</u>		<u></u>		
		Seeding rates are poseed (PLS) per acre	() ()		J.	High Plains North (77A)	Southern High Plains (7	High Plains	High Plains,	dia	Rolling Plains,	Rolling Plains	Maximum Seeding Dates 7	æ	Moderately	Ę	Moderately Fine		
		pee	Native (Season	edd.	I gu		등	ᡖ	ana	i≣	إإ	0)	Coarse	apc	Medium	apc	Fine	_
Name	Variety	Š	Ż	Ñ	\supset	ΞÏ	Ĭ,	ゴ	Ξ	ပိ	ĸ	ĸ		ŏ	Ž	Ž	Ž	ίĪ	Comments
PERENNIAL GRASSES 1/, 4/ (Continued)																			
Galletagrass		5.2	N	W	Х	x >	ďχ	X	Х	Х		Х	12/1 - 6/1						Western Tier of Counties in Panhandle-South Plains
Grama: black	Nogal		N			x >	(X	X	Х	Х	Х	_	12/1 - 6/1						
Grama: blue	Hachita, Lovington		N			x >	(X		_	Х	Х	Х	12/1 - 6/1		Х	Х	Х	Х	
	El Reno, Haskell, Vaughn,																		
Grama: sideoats	Niner	4.5		W		X)				_		Χ	12/1 - 6/1		Х			Х	
Green sprangletop		1.7	N	W	Χ	X)	(X	X	Х	Х	Χ	Х	12/1 - 6/1	Х	Х	Х	Х		
Indiangrass: yellow	Cheyenne, Lometa	4.5	N	W	_	x >	(X			_	х	Х	12/1 - 6/1		Х				Use only when adequate moisture conditions exist. Forage will be produced, but seed may not be produced each year.
Johnsongrass		10.0	_	W	Χ	X)		_	Х	Х	Χ		12/1 - 6/1	Х	_		_		Cover depth is 1/4 to 1/2 inches.
Kleingrass	Selection-75	1.5	_	W	Χ	X)	(X	X	Х	Х	Χ	Х	12/1 - 6/1		Х	_	_		
Kleingrass	Verde	1.7		W	•••	X >	(X	· / ·	Х	Х	Х	Х	12/1 - 6/1		Х		Х	Х	
Lovegrass: lehman		1.5		W	<i>^</i> ``	X)	(X		Х	Х	Χ		12/1 - 6/1		Х				
Lovegrass: weeping	common, Ermelo	1.5		W	Х	X)	(X	X	Х	Х	Х	Х	3/15 - 6/1	Χ	_				
Lovegrass: wilman	common, Palar	1.5	_	W	_	+	+	-	-	-	Х	Χ	12/1 - 6/1	Χ			Х	Х	Southern Counties of Rolling Plains
Lovegrass: sand, sandhill	common, Mason	1.5		W	Х	X)	(X	· / ·	X	X	Х		12/1 - 6/1	Х	Χ	Х	-		
Orchardgrass		5.0	_	С	Х	X)	X	X	Х	Х	Х	Х	9/1 - 11/15			l			Cover depth is 1/2 to 3/4 inches.
Panicum: blue		2.0	_	W	_	X)	(X	_	X	X	Х	X	12/1 - 6/1	Х	_		Х		
Ryegrass: perennial	0.1.1.0.11.11	4.0	_	C	_	X)	(X		X	Х	X	X	9/1 - 11/15	-	Х	٠.			A.L. a. La P
Sacaton: alkali, big	common, Salado, Saltalk	1.0	_	VV	_	X)	(X	_	X	v	X	_	12/1 - 6/1	~	\ \ \	_	_		Adapted to saline sites.
Sorghum almum	Alamo	12.0 2.0	_	VV	_	X) X)	(X	_	X	_	X	X	12/1 - 6/1 12/1 - 6/1		X				Cover depth is 1/4 to 1/2 inches. Forage will be produced, but seed may not be produced each year.
Switchgrass	Blackwell, Caddo, Kanlow,	2.0	IN	VV	^	<u> </u>	1	^	^	^	^	^	12/1 - 6/1	^	^	^	^	^	Forage will be produced, but seed may not be produced each year.
Switchgrass	local harvest	3.5	N	w	Х	x b	ďχ	X	X	Х	Х	х	12/1 - 6/1						Forage will be produced, but seed may not be produced each year.
Texas bluegrass		0.8	N	С	Χ	x >	ίX	X	Х	Х	Х	Χ	9/1 - 11/15		Х	Х	Х	Х	
Texas wintergrass		15.0	N	С	Х	X)	(X	X	Х	Х	Χ	Х	9/1 - 11/15	L	Х	Χ	Χ	Χ	
Vine-mesquite		6.0	N	w	x	,	(x	l _x	X	Х	Х	x	12/1 - 6/1		×	Х	Х	x	
Wheatgrass: tall	Jose, Largo	12.0	_	С		x >	_				Х		9/1 - 11/15	Х	Х				sites, or sites that receives extra runoff. Cover depth is 1/4 to 1/2 inches.
Wheatgrass: pubescent	· ·	11.0	_	C	_	x >	(x	X	X	X	_	Х	9/1 - 11/15	Ħ	Ť	Ħ		П	Cover depth is 1/4 to 1/2 inches.

Appendix 1 - Planting r	ates for drill or broadca	ast see	dinc	and	l eni	rinn	ina	in T	Геуа	s 7	one 1						1
Appendix 1 1 landing 1	dies for drin or broader				Adap							Π					
		e li				Reso	ource	Are	as		Seeding Guidance		dap				
		. pui	_	20	B	í,	0	7115	, ,	П	Culdulloc	10)	301	Gre	oups	S 0/	
		nds 3/, 6	(I) pa	(s		12	(7)	2 2	Plains, West (78B)	Ô	86						
		noc e	ence	rea	777 Vest) SL	est	wes	st (7	(78	· · ·						
		acr	trod	n B	휘	lai	it i	뷥	Ves	ast	Maximum Seeding Dates 7		rse				
		es a	r N	dia	힏호	Jh F	Sou	Sol	s, \	s	Ē B		Soa		-ine		
		rate S)	1) o	ana	ns l	Ξ̈́	us (ns,	lain	lain	Mag		<u>\$</u>		ly F		
		ing (PL	e ()	S	Jai	ern	Plai	ا غالة	g P	g P	990	ø	rate	Ξ	rate		
		Seeding rates are pounds pure live seed (PLS) per acre 3/, 6/, 10/	Native (N) or Introduced Season of growth	Upper Canadian Breaks (7	High Plains North (77A) High Plains, Northwest	Southern High Plains (77C)	High Plains Southwest (77D	High Plains, Southwest (77	Rolling F	Rolling Plains East (78C)	S	Coarse	Moderately Coarse	Medium	Moderately Fine	Fine	
Name	Variety	S S	Z Ø	⊃	ĪΪ	ഗ്	Ξ.	ΞĊ	Šĕ	ĸ		ŏ	Š	Ž	Ž	這	Comments
PERENNIAL GRASSES 1/, 4/ (Continued)																	
Wheatgrass: western	Arriba, Barton, common	7.0	N W	Х	хх	Х	Х	хх	(X	Х	9/1 - 11/15		Х	Χ	Х	Χ	Cover depth is 1/4 to 1/2 inches.
Wildrye: canada	7 triba, Barton, common	10.0	N C		XX	Х		XX		Х	9/1 - 11/15	T		Х	Х		Cover depth is 1/4 to 1/2 inches.
Wildrye: virginia		12.0	N C	Х	ХХ	Х	Х	ΧХ	(X	Х	9/1 - 11/15		Х	Х	Х	Х	Cover depth is 1/4 to 1/2 inches.
Appendix 1 - Planting r	ates for drill or broadca	ast see	ding	and	spi	rigg	ing	in T	Геха	s, Z	one 1						
		/e			Adap					nd	Seeding	Ι.					
		rates are pounds pure live S) per acre 3/, 6/, 10/				Reso	ource	Are	as		Guidance		dapi				
		pur /, 1		(70	â		<u> </u>	<u>ا آ</u>	1	П		۳	1	Git	Jupa	3 0/	
		ds /, 6	9	S	_ (2)	70	[77]	5 6	(78B)	<u>0</u>	_						
		our 3	ice	eak	7A est	s (7	est	est	(78	78(7, 8/						
		e p	po q	ф	ڄَاجَ	lain	hwe.	å l¥	est	ıst (E S		se				
		s ar er a	Int	läi	North (77A) Northwest	H P	ont	Sou a	, N	E	Dat		oar		ne		
		ate:	or gr	nac	S S	Hig	s S	S. S.	ains	ains	√ax ing ax		S C		УF		
		ng r PL	2 0	ပိ	<u>a</u> <u>a</u>	L.	lai.	<u>a</u>	E E	E I	Maximum Seeding Dates 7	_	ate	۶	atel		
		Seeding rates are poseed (PLS) per acre	Native (N) or Introduced Season of growth	Upper Canadian Breaks	High Plains North (77A)	Southern High Plains (77C)	High Plains Southwest (77D)	High Plains, Southwest (77D Canadian River Breaks (77E	Rolling Plains, West (78E	lling	ഗ്	Coarse	Moderately Coarse	Medium	Moderately Fine	Φ	
Name	Variety	Sec	Se	ŋ	H Ei B	Sol	Hig	E C	Rol	Rol		Ö	Mo	Me	Мо	Fine	Comments
PERENNIAL FORBS,																	
LEGUMES, SHRUBS 1/, 4/																	
Alfalfa		20.0	I C	Х	хх	Х	Х	ΧХ	(X	Х	9/1 - 11/15	Х	Х	Х	Х	Х	Pounds of commercial seed. Irrigated or Dryland Varieties on suited soils
Alfalfa		4.5	I C	Χ	ХХ	Х	Χ	ХХ	(X	Χ	9/1 - 11/15	Х	Х	Х	Χ		Commercial Seed - For CRP and Wildlife Plantings
Awnless bushsunflower		2.6	N W	Χ	ХХ	Х		ΧХ	(X	Х	12/1 - 6/1		Х			П	
Engelmanndaisy		15.0	N C	Χ	ХХ	Х		ΧХ	(X	Χ	9/1 - 11/15	L	<u> </u>	Х	Χ	Х	
Fourwing saltbush		15.5	N W	+ +	X X	Х		ХΧ		Х	12/1 - 6/1	Х	-	Х	Χ	Ш	
Gayfeather: dotted		10.0	N W	_	X X	Х		ХХ	_	Х	12/1 - 6/1	1	Х		Χ	Х	
Illinois bundleflower		13.6	N W	-	X X	Х		XΧ	(X	Х	12/1 - 6/1	Х	_	_	Χ	Χ	
Leadplant		4.5	N W	_	Х	H	Х	_	_	Х	12/1 - 6/1	Х	_	Χ	Χ	H	
Littleleaf leadtree		7.0	N W	_	X	X	X	_ X		Х	12/1 - 6/1	1	Х		Х	Х	
Maximilian sunflower		3.0	N W	+ +	XX	Х	_	X X		Х	12/1 - 6/1	Ł	 	Х	Х	Χ	
Orange zexmenia		3.4	N W		XX	X		X	X	X	12/1 - 6/1	X	X	•	Х		
Prairieclover: purple		3.0	N W	_	XX	Х		X	X	_	12/1 - 6/1	₽		Х		X	
Prairieclover: white			N W		X X	Χ	Х	Х	Х	X	12/1 - 6/1	╄	Х	Х	Χ	Χ	
Sainfoin			-	-	-	+		V \	/ /	X	12/1 - 6/1	╊	\vdash	_	_	$\overline{}$	
Sesbania: drummond Western ragweed		20.0 7.5	N W		y v	Х		X X		X	12/1 - 6/1 12/1 - 6/1	X	~	X	X	X	
vvosieiii rayweeu	I .	7.0	14 44	^	^ ^	^	^	^ ^	\ \ ^	^	12/1 - 0/1	1^	^	^	^	^	

		pure live 3/, 10/							Majo Area		nd	Seeding Guidance		dapt Soil				
Name	Variety	Seeding rates are pounds puseed (PLS) per acre 3/, 6/,	Native (N) or Introduced (I)	Upper Canadian Breaks (70	High Plains North (77A)	High Plains, Northwest (77B	Southern High Plains (77C)	High Plains Southwest (775	Canadian River Breaks (77E	Rolling Plains, West (78B)	Rolling Plains East (78C)	Maximum Seeding Dates 71, 8/	Coarse	Moderately Coarse	Medium	Moderately Fine	Fine	Comments
ANNUAL FORBS, EGUMES, SHRUBS 1/, 4/	variety	0, 0,		<u> </u>	1_		בונט	_ _	_ 0	Œ	ш_		U	<	<	_	јш.	- Johnnenes
Clover: rose		5.2	ı c	: [T)	()	(Х	Х	9/1 -11/15				Х	Х	
Clover: subterranean		16.0	I C	;)	<	Х	Х	9/1 -11/15				Х	Х	
Clover: white		1.0	I C	;)	κ X	Х	Х	9/1 -11/15				Х	Х	
artridge pea		13.4	N۷	۷X	X	Χ	X >	()	ΚX	Χ	Х	12/1 - 6/1	Х	Х	Х	Х		
ingletary pea		35.0	I C	; X	X	Χ	X)	()	< X	Χ	Х	9/1 - 11/15				Х		
Sunflower	Native	5.0	NV	۷X	X	Х	X >	()	< X	Χ		4/1 - 7/1	Х	Х		_	_	
weetclover: annual		10.0	I C	; X	X	_	X)	_	(X	Χ	_	9/1 - 11/15			Х		_	Commercial Seed - Forage Production Rates
Sweetclover: biennial		10.0	I C	; X	X	_	X)	_	_	Χ		9/1 - 11/15			Х		_	Commercial Seed - Forage Production Rates
Sweetclover: annual		3.8	I C	; X			X)		(X	Χ		9/1 - 11/15						Commercial SeedCRP and Wildlife Plantings
Sweetclover: biennial	1	3.8	I C	: X	ΙX	X	$X \mid X \mid$		< X	X	Х	9/1 - 11/15		X	X	X	I X	Commercial Seed CRP and Wildlife Plantings

FOOTNOTES:

- 1/ Species are listed by common name and where applicable by released cultivar or variety. Planting rates are shown either as by PLS or commercial rates.
- 2/ Conversion factors: 3.5 bushels of tops = 1 bale; 7 bushels of sprigs = 1 bale; 1.25 cubic feet = 1 bushel; 15 pounds = 1 bushel.
- 3/ PLS = Pure Live Seed. To compute PLS from seed analysis information: Percent PLS = (% germination + % hard [dormant] seed) X % purity. Seeding rate in PLS pounds divided by % PLS will give you the bulk seeding rate needed to get the right amount of pure live seed.
- 4/ Local harvest may be used when seeding species of unknown or common variety, or natural stands. Local harvested seed should have its geographic origin within 200 miles north, 300 miles south, 100 miles east and 200 miles west of the site where it will be planted. It is also desirable that locally harvested seed be used on soils of the same texture as soils where seed was harvested.
- 5/ The TZ (tetrazolium salt) test can be used for the germination factor in figuring PLS if the dealer furnishes the seed tag or other proof the test was run by a reputable seed lab.
- 6/ Drill planting is defined as rows spaced less than 20 inches apart. Row planting rates will be 1/3 of drill rates.
- 7/ Planting done outside of these dates must have prior approval from the appropriate zone specialist.
- 8/ The optimum planting depth for all species is 1/8 to 1/4 inch unless it is otherwise noted for the individual specie.
- 9/ Soil groups are based on the following textures: **Coarse** Coarse sand, Sand, Fine sand, Very fine sand, Loamy coarse sand, Loamy sand, Loamy fine sand and Loamy very fine sand; **Moderately Coarse** Sandy loam, Coarse sandy loam and fine sandy loam; **Medium** Very fine sandy loam, Loam, Silt loam and silt; **Moderately Fine** Clay loam, Sandy clay loam and Silty clay loam; **Fine** Sandy clay, silty clay and clay.
- 10/ For Critical Areas, e.g. Grassed Waterways, Critical Area Planting, and other sites receiving increased water flow, traffic, or wind erosion, the seeding rate may be adjusted to up to twice the listed seeding rate. Consideration should be given by the Designated Conservationist as to the suitability of the plants to the application and site conditions.